Year 2000 and 2001 Priority Actions

Non-Seawater Sources of Bromide - 11

1. General Description of the Action

CALFED needs to conduct an evaluation of the importance of non-ocean sources of bromide in the Delta system and estimate the potential of Water Quality actions to reduce bromide. A primary objective of this evaluation is to identify priority actions for the first stage of program implementation.

The goal is to determine the potential for limiting non-ocean sources of bromide and the potential to attain drinking water standards for brominated disinfection byproducts based on these anticipated reductions.

Bromide is present is sea water. An important mechanism for bromide entry into Delta drinking water supplies is through mixing with waters of San Francisco Bay and the Pacific Ocean. However, other sources of bromide may exist, and CALFED needs to evaluate these sources and to institute corrective actions where feasible to reduce their contributions. Organic carbon can be reduced through treatment, either at the source or at drinking water treatment facilities.

Drinking water purveyors will benefit from this study in so far as bromide reductions can be made. Ecosystem proponents will benefit from this study by providing mechanisms to reduce bromide in the south delta without using additional water from other sources.

2. Cost Estimates

Approximately \$0.5 million dollars are needed each year for the study. Cost sharing might be possible through the MWQI program if funds are available.

CALFED staff requirements would amount to one staff person for about 6 months per year to analyze data and review various records from other agencies, and review studies regarding potential bromine contributors. Limited supervisory time is necessary for review of staff persons work. The remainder of the funds would be spent on sampling and analysis of samples.

3. Program Administration and Governance

The CALFED Water Quality Program should oversee the coordination of agencies and approval of funds spent. Contracts for sampling should be let through the Department of Water Resources. CALFED staff will complete the technical evaluation of the data. An alternate federal contract authority could be the US Bureau of Reclamation or USGS.

4. Program Coordination

This program involves sampling not currently performed and integration of historical data from several sources. The Department of Water Resources or the Regional Water Board would be able to do the sampling.

No other agencies are looking at this aspect of disinfection byproduct precursors. The Municipal Water Quality Program of DWR could contribute to this study, provided funds are made available.

5. Schedule

CALFED staff has already assembled some of the existing data on bromide in the Delta. Additional sampling and further study could be initialized immediately upon receipt of funding. The initial study would continue for a calendar year and be complete after evaluation of the data.